Some Tauberian conditions on logarithmic density

ABSTRACT

This article is based on the study on the λ-statistical convergence with respect to the logarithmic density and de la Vallee Poussin mean and generalizes some results of logarithmic λ-statistical convergence and logarithmic (V,λ)-summability theorems. Hardy's and Landau's Tauberian theorems to the statistical convergence, which was introduced by Fast long back in 1951, have been extended by J.A. Fridy and M.K. Khan (Proc. Am. Math. Soc. 128:2347–2355, 2000) in recent years. In this article we try to generalize some Tauberian conditions on logarithmic statistical convergence and logarithmic (V,λ)-statistical convergence, and we find some new results on it.

Keyword : Statistical convergence; λ-convergence; de la Vallee Poussin mean; Logarithmic densit